



Form PTO-1449 (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Use several sheets if necessary)Atty. Docket No.
1856/36301
(9782.0-02)Serial No.
10/706,644Applicant
Shuibo Xie et al.Filing Date
November 12, 2003

Group

1754

REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	Translation	
							YES	NO

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

WAL	CA	Brooks et al., "Synthesis Of Highly Dispersed Supported Metal Catalyst Via Chemical Dissolution And Precipitation Of Eutectic Alloys," <u>Surface Technology</u> (1980), Vol. 11, pp. 333-47. (no month)

EXAMINER

Wayne A. Engel

DATE CONSIDERED

9-24-06

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.



Form PTO-1449 (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(SUPPLEMENTAL)
(Use several sheets if necessary)

Atty. Docket No.
1856/36301
(9782.0-02)

Serial No.
10/706,644

Applicant
Shuibo Xie et al.

Filing Date
November 12,
2003

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REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	Translation	
							YES	NO
WAL	BA	WO 03/078309	25/09/03	PCT	3	26	X	
WAL	BB	WO 01/51414	19/07/01	PCT	3	40	X	
WAL	BC	WO 01/96234	20/12/01	PCT	3	38	X	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

Wayne A. Angel

DATE CONSIDERED

7-24-06

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

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1856-36301
(9782.0-02)Serial No.
10/706,644INFORMATION DISCLOSURE STATEMENT BY APPLICANT
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REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

REFERENCE DESIGNATION OF PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
WAL	AA	3,752,775	08/14/1973	Yamaguchi et al.	252	464	
WAL	AB	4,537,873	08/27/1985	Kato et al.	502	242	
WAL	AC	4,585,752	04/29/1986	Ernest	502	314	
WAL	AD	4,738,946	04/19/1988	Yamashita et al.	502	303	
WAL	AE	4,793,797	12/27/1988	Kato et al.	143	7	
WAL	AF	4,961,786	10/09/1990	Novinson	106	692	
WAL	AG	5,837,634	11/17/1998	McLaughlin et al.	501	127	
WAL	AH	6,399,528	06/04/2002	Krell et al.	501	80	03/05/2001
WAL	AI	2003/0032554	02/13/2003	Park et al.	502	302	05/13/2002
WAL	AJ	4,151,123	04/24/1979	McCann, III	252	462	
WAL	AK	5,736,482	04/07/1998	Durand et al.	502	303	
WAL	AL	6,015,285	01/18/2000	McCarty et al.	431	7	
WAL	AM	6,455,597	09/24/2002	Hohn et al.	518	715	

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	Translation
					YES NO

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

Wayne A. Lang

DATE CONSIDERED

7-24-06

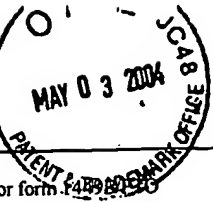
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.



Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/706,644		
		Filing Date	November 12, 2003		
		First Named Inventor	Shuibo Xie et al.		
		Group Art Unit	1754		
Examiner Name	Lange				
Sheet	2	of	4	Attorney Docket Number	1856-36301 (97826-02)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	
WAL	AN	Amato et al., <i>Sintering of Pelleted Catalysts for Automotive Emission Control</i> , pp. 187-197. (no date)	
WAL	AO	Arai et al., <i>Recent Progress in High-Temperature Catalytic Combustion</i> , Catalysis Today, 10 (1991) pp. 81-94. (no month)	
WAL	AP	Arai et al., <i>Thermal Stabilization of Catalyst Supports and their Application to High-Temperature Catalytic Combustion</i> , Applied Catalysis A: General 138 (1996) pp. 161-176. (no month)	
WAL	AQ	Artizzu-Duart et al, <i>Catalytic Combustion of Methane on Substituted Barium Hexaaluminates</i> , Catalysis Today 59 (2000) pp. 163-177. (no month)	
WAL	AR	Beguin et al., <i>Stabilization of Alumina by Addition of Lanthanum</i> , Applied Catalysis 75 (1991) pp. 119-132. (no month)	
WAL	AS	Bish et al., <i>Quantitative Phase Analysis Using the Rietveld Method</i> , J. Appl. Cryst. (1998) 21, pp. 86-91. (no month)	
WAL	AT	Cai et al., <i>Atomic Scale Mechanism of the Transformation of γ-Alumina to α-Alumina</i> , Physical Review Letters, Vol. 89, No. 23, (12/02/2002) pp. 235501-1 – 235501-4. (no month)	
WAL	AU	Chen et al., <i>High Temperature Thermal Stabilization of Alumina Modified by Lanthanum Species</i> , Applied Catalysis A: General 205 (2001) pp. 159-172. (no month)	
WAL	AV	Dexpert-Ghys, <i>Optical and Structural Investigation of the Lanthanum β-Alumina Phase Doped with Europium</i> , Journal of Solid State Chemistry 19, (1976) pp. 193-204. (no month)	
WAL	AW	Farrington et al., <i>The Lanthanide β Alumina</i> , Applied Physics A 32 (1983) pp. 159-161. (no month)	
WAL	AX	Groppi et al., <i>Preparation and Characterization of Hexaaluminate-Based Materials for Catalytic Combustion</i> , Applied Catalysis A: General, 104 (1993) pp. 101-108. (no month)	
WAL	AY	Jang et al., <i>Catalytic Oxidation of Methane Over Hexaaluminates and Hexaaluminate-Supported Pd Catalysts</i> , Catalysis Today 47 (1999) pp. 103-113. (no month)	
WAL	AZ	Johansson et al., <i>Development of Hexaaluminate Catalysts for Combustion of Gasified Biomass in Gas Turbines</i> , Journal of Engineering for Gas Turbines and Power, Vol. 124 (04/2002) pp. 235-238. (no month)	
WAL	BA	Kato et al., <i>Preparation of Lanthanum β-Alumina with High Surface Area by Coprecipitation</i> , Journal of the American Ceramic Society, 70 [7] (07/1987) pp. C-157-159.	
WAL	BB	Levy et al., <i>The Effect of Foreign Ions on the Stability of Activated Alumina</i> , Journal of Catalysis 9 (1967) pp. 76-86. (no month)	
Examiner Signature	Wayne A. Lange		Dated Considered
			7-24-04

MAY 03 2004



Substitute for form 1482

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/706,644
Filing Date	November 12, 2003
First Named Inventor	Shuibo Xie et al.
Group Art Unit	1754
Examiner Name	Lange
Attorney Docket Number	1856-36301 (9782.0-02)

Sheet 3 of 4

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.
WAL	BC	Liu et al., <i>Partial Oxidation of Methane over Nickel Catalysts Supported on Various Aluminas</i> , Korean Journal of Chemical Engineering 19 (5) pp. 735-741 (2002). (no month)
WAL	BD	Liu et al., <i>Partial Oxidation of Methane over Ni/Ce-ZrO₂/O-Al₂O₃</i> , Korean Journal of Chemical Engineering 19(5) pp. 742-748 (2002). (no month)
WAL	BE	Machida et al., <i>Effect of Additives on the Surface Area of Oxide Supports for Catalytic Combustion</i> , Journal of Catalysts 103 (1987) pp. 385-393. (no month)
WAL	BF	Machida et al., <i>Analytical Electron Microscope Analysis of the Formation of BaO-6Al₂O₃</i> , Journal of American Ceramic Society 71[12] pp. 1142-47 (1988). (no month)
WAL	BG	Machida et al., <i>Effect of Structural Modification on the Catalytic Property of Mn-Substituted Hexaaluminates</i> , Journal of Catalysis 123 (1990) pp. 477-785. (no month)
WAL	BH	Matsuda et al., <i>8th International Congress on Catalysis Volume IV: Impact of Surface Science on Catalysis Structure-Selectivity/Activity Correlations New Routes for Catalyst Synthesis</i> (pp. IV-879-889). (no month)
WAL	BI	Miao et al., <i>Partial Oxidation of Methane to Syngas over Nickel-Based Catalysts Modified by Alkali Metal Oxide and Rare Earth Metal Oxide</i> , Applied Catalysts A: General 154 (1997) pp. 17-27. (no month)
WAL	BJ	Nair et al., <i>Pore Structure Evolution of Lanthana-Alumina Systems Prepared through Coprecipitation</i> , Journal of American Ceramic Society 83[8] (2000) pp. 1942-1946. (no month)
WAL	BK	Oudet et al., <i>Thermal Stabilization of Transition Alumina by Structural Coherence with LnAlO₃ (Ln = La, Pr, Nd)</i> , Journal of Catalysis 114, (1998) pp. 112-120. (no month)
WAL	BL	Rahkeev et al., <i>Transition Metal Atoms on Different Alumina Phases: The Role of Subsurface Sites on Catalytic Activity</i> , Physical Review B 67, 115414 (2003) pg. 4. (no month)
WAL	BM	Rietveld, <i>A Profile Refinement Method for Nuclear and Magnetic Structures</i> , Journal of Appl. Cryst. (1969) 2, pp. 65-71. (no month)
WAL	BN	Roh et al., <i>Partial Oxidation of Methane over Ni/O-Al₂O₃ Catalysts</i> , Chemistry Letters 2001 (pp. 666-667). (no month)
WAL	BO	Santos et al., <i>Standard Transition Aluminas, Electron Microscopy Studies</i> , Materials Research, Vol. 3 No. 4 (2000) pp. 104-114. (no month)
WAL	BP	Schaper et al., <i>The Influence of Lanthanum Oxide on the Thermal Stability of Gamma Alumina Catalyst Supports</i> , Applied Catalysis 7 (1983) pp. 211-220. (no month)
WAL	BQ	Schaper et al., <i>Thermal Stabilization of High Surface Area Alumina</i> , Solid State Ionics 16 (1985) pp. 261-266. (no month)
WAL	BR	Seo et al., <i>Experimental and Numerical Studies on Combustion Characteristics of a Catalytically Stabilized Combustor</i> , Catalysis Today 59 (2000) pp. 75-86. (no month)
Examiner Signature	Wayne A. Lange	
Dated	7-24-06	
Considered		



Substitute for form 1005/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	4	of	4	Attorney Docket Number	1856-36301 (97820-02)
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Complete if Known

Application Number	10/706,644
Filing Date	November 12, 2003
First Named Inventor	Shuibo Xie et al.
Group Art Unit	1754
Examiner Name	Lengel

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.
WAL	BS	Russell et al., <i>Thermal Transformations of Aluminas and Alumina Hydrates</i> , Industrial and Engineering Chemistry Vol. 42, No. 7 (1950) pp. 1398-1403, (no month)
WAL	BT	Subramanian et al., <i>Characterization of Lanthana/Alumina Composite Oxides</i> , Journal of Molecular Catalysts, 69 (1991) pp. 235-245, (no month)
WAL	BU	Taylor, <i>Computer Programs for Standardless Quantitative Analysis of Minerals Using the Full Powder Diffraction Profile</i> , Powder Diffraction, Vol. 6, No. 1 (1991) pp. 2-9, (no month)
WAL	BV	Tietz et al., <i>Investigations on Lanthanide-ion-exchanged β and β''-Alumina</i> , Journal of Alloys and Compounds, 192 (1993) pp. 78-80, (no month)
WAL	BW	Tijburg et al., <i>Application of Lanthanum to Psuedo-Boehmite and γ-Al₂O₃</i> , Chapman and Hall (1991) pp. 6479-6486, (no month)
WAL	BX	Weng et al., <i>Mechanistic Study of Partial Oxidation of Methane to Syngas Using In Situ Time-Resolved FTIR and Microprobe Raman Spectroscopies</i> , The Chemical Record Vol. 2, pp. 102-113 (2002), (no month)
WAL	BY	Wu et al., <i>Coupled Thermodynamic-Phase Diagram Assessment of the Rare Earth Oxide-Aluminium Oxide Binary Systems</i> , Journal of Alloys and Compounds, 179 (1992) pp. 259-287, (no month)
WAL	BZ	Zhou et al., <i>Structures and Transformation Mechanisms of the η, γ and θ Transition Aluminas</i> , International Union of Crystallography (1991) pp. 617-630, (no month)
Examiner Signature	Wayne A. Lengel	Dated Considered 7-24-06

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
 (Use several sheets if necessary)

 Atty. Docket No.
 1856-36301
 (9782.0-02)

 Serial No.
 10/706,644

 Applicant
 Shuibo Xie et al.

 Filing Date
 November 12, 2003

 Group
 1754

REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
WAL	AA	3,718,418	02/27/73	Fleming et al.	423	415	
WAL	AB	5,268,157	12/07/93	Blass et al.	423	403	
WAL	AC	6,277,894	08/21/01	Agee et al.	518	700	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	Translation	
							YES	NO
WAL	AD	WO 00/00426	06/01/00	PCT	CO1B	3/38	X	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

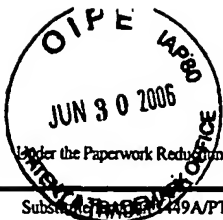
WAL	AE	Search Report for Appn. No. PCT/US03/36008, dated 12/05/04; (2 p.)						

EXAMINER

DATE CONSIDERED

7-24-06

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Subsection 149A/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	10/706,644	
			Filing Date	November 22, 2003	
			First Named Inventor	Shuibo Xie	
			Group Art Unit	1754	
			Examiner Name	Camel Nguyen <i>Large</i>	
Sheet	1	of	2	Attorney Docket Number	1856-36301 (9782.0-02)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
<i>WAL</i>	AA	US- 6409940 B1	06-25-2002	Gaffney et al	
<i>WAL</i>	AB	US- 2002/0002794 A1	01-10-2002	Figuroa et al	
<i>WAL</i>	AC	US- 2002/0012624 A1	01-31-2002	Figuroa et al	
<i>WAL</i>	AD	US-2002/0035036 A1	03-21-2002	Figuroa et al	
<i>WAL</i>	AE	US-2002/0115730 A1	08-22-2002	Allison et al	
<i>WAL</i>	AF	US- 2002/0172642 A1	11-21-2002	Dindi et al	
<i>WAL</i>	AG	US- 2002/0177628	11-28-2002	Gaffney et al	
<i>WAL</i>	AH	US- 2003/0180215	09-25-2003	Niu et al	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number * Kind Code ³ (if known)				
WAL	BA	GB-2 240 284 A	07-31-1991	Snamprogetti S.p.A.		
WAL	BB	GB- 2 274 284 A	07-20-1994	Snamprogetti S.p.A.		
WAL	BC	EP- 0 629 578 B1	08-30-2000	Shell International Research		

Examiner Signature	<i>Wayne A. Large</i>	Date Considered	7-24-06
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*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORM TO THIS ADDRESS. Send To Commissioner For Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/706,644
				Filing Date	November 22, 2003
				First Named Inventor	Shuibo Xie
				Group Art Unit	1754
				Examiner Name	Camel Nguyen <i>Langel</i>
Sheet	2	of	2	Attorney Docket Number	1856-36301 (9782.0-02)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T ²
<i>WAL</i>	CA	C.S. BROOKS ET AL 'Synthesis of highly dispersed supported metal catalysts via chemical dissolution and precipitation of eutectic alloys' Surf. Technology Volume 11, Issue 5, Pages 333-347 (1980). <i>(no month)</i>	

Examiner Signature	<i>Wayne A. Langel</i>	Dated	7-24-06
		Considered	

*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORM TO THIS ADDRESS. Send To Commissioner For Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

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